VoIP

IpChannel Bank Multi-Port FXS Gateway

SmartNode™ 4400 Series

The IpChannel Bank is the perfect VoIP gateway for applications requiring 12 to 32 concurrent analog voice/fax calls within a single redundant solution.

12, 16, 24 or 32 FXS

•Simultaneous voice or fax calls on all ports. Advanced local call switching.

Full SIP and T.38 support

Supports the complete range of industry standard VoIP: SIP, H.323, T.38 fax, fax and modem bypass, DTMF relay. Codecs G.729, G.723 etc.

Secure Toll-Quality VoIP

DownStreamQoS and Voice-over-VPN with adaptive traffic management and shaping for maximum voice quality and secure voice communication.

Complete Access Routing

*Two 10/100 Ethernet ports with auto MDI-X. Access router with NAT, Firewall, PPPoE, DHCP, DynDNS, multiple VLANs & VPN with IPsec**

Outstanding Interoperability

Interoperable for voice and T.38 fax with leading SIP service providers, soft-switch vendors and Asterisk™ IP-PBX

The SmartNode 4400 Series IpChannel Bank is the perfect business solution for applications requiring 12 to 32 concurrent analog voice/fax calls. The IpChannel Bank transforms any PBX system, analog call-center application, or ISP MDU service into a state-of-the-art packet-voice system without requiring costly equipment replacement or upgrades.

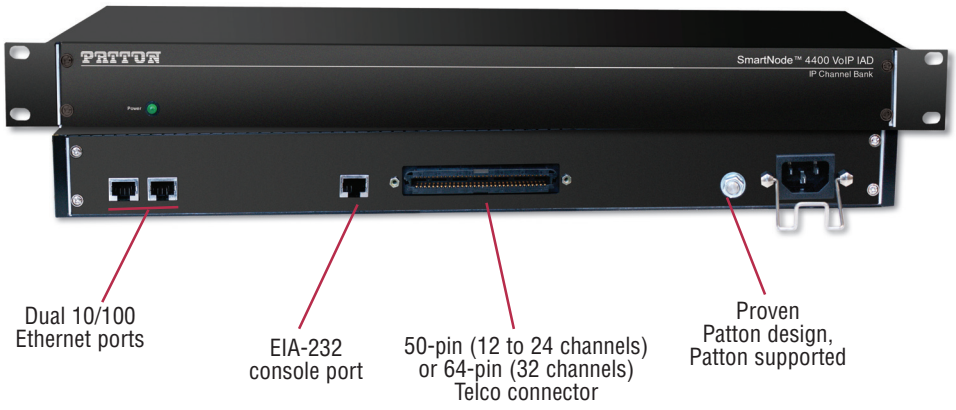
There are several models in the SN4400 Series—ranging from 12 to 32 FXS ports. The SN4400 Series supports key industry-standard VoIP signaling protocols such as SIP, H.323, and T.38 Fax Relay—plus fax-bypass and modem-bypass. This ensures interoperability with the leading soft switches and VoIP services.

Built-in Quality of Service (QoS) features include voice prioritization and traffic management via configurable service-policy profiles. Patton's advanced DownStreamQoS ensures clear, uninterrupted voice--even over best-effort networks such as the Internet. Packet classification using 802.1p, TOS, and DiffServ makes integration with existing managed QoS networks easy.

Create custom security profiles for a comprehensive security environment. IPsec in the SN4400 Series delivers data integrity, authentication, anti-replay and data confidentiality. Firewall capabilities include Access Control Lists (ACLs), IP-address and port filtering, protection against Denial of Service (DoS) attacks, and use of second Ethernet port as DMZ.

Offering easy setup, reliable operation, and third-party interoperability on a proven platform, the SN4400 Series IpChannel Bank sits at the core of cost-effective business solutions. The investment protection you need for the future is here today.

Visit www.patton.com for more information.

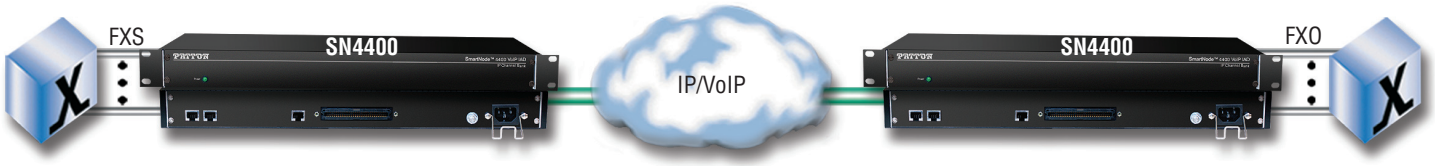


PATTON®

Protect your investment—integrate analog equipment

Legacy is not bad! While VoIP offers distinct advantages in almost every aspect of communications, in many cases it is appropriate to integrate legacy equipment into a VoIP system rather than replacing it. ***The SN4400 Series is the enabler to protect your investment in the analog equipment.*** It enables enterprises to extend multiple analog lines from a PBX to a remote location with existing cabling or phones, taking advantage of a single IP link to transport up to 32 voice calls. The remote location can be a building around the block as well as a partner in another continent.

For call centers, the SN4400 is the ideal, reliable solution to integrate legacy work desks and cabling into next-generation, VoIP based call center software.

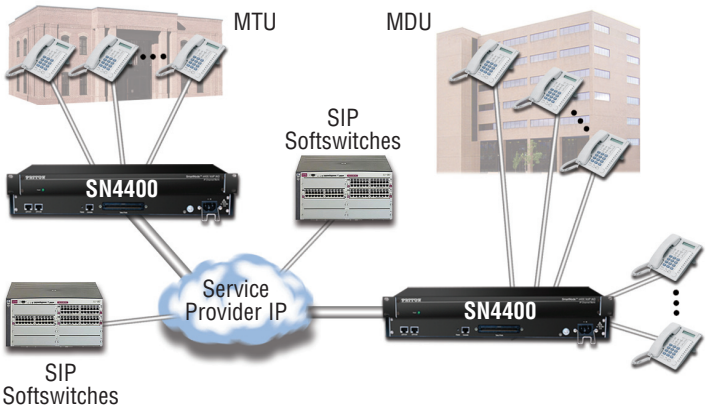


Bulk FXS Extension

Legacy MTU/MDU migration to VoIP based networks

The SN4400 IPChannel Bank offers an ideal way for Service Providers (SP) to migrate their existing networks to standards based VoIP networks. By using the Telco Connector port, the existing closet wiring in the MTU/MDU can be utilized and the customer's analog devices can now be connected to feature rich VOIP-based networks. This protects the investments that have been made in analog equipment and wiring by various MTU/MDU facilities and leverages it further by connecting these facilities to the Service Provider's VoIPbased networks.

Above all, it allows simple and transparent migration process for enterprise and residential customers in the MTU/MDU facilities.



*Specifications**

Capacity
12, 16, 24, 32 simultaneous VoIP calls

Data Services
Two 10/100 Ethernet ports • Complete IP access router • DHCP Client & server • Packet fragmentation • Static firewall, NAT, NAPT RFC 1631 access control lists • DMZ port

Quality of Service
Voice priority • DownStreamQoS™ • Traffic management, shaping and policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q, VLAN tag insertion/deletion (4096 VLAN IDs, multiple VLAN support

Management
Web/HTTP, CLI with local console and remote Telnet access • TFTP configuration & firmware loading • SNMP MIB II and product MIB • Secure autoprovisioning for both firmware and unit/subscriber configuration • Built-in diagnostic tools (trace, debug, call generator)

FXS Connectivity
2-wire Loopstart on 50pin (12 to 24 channels) or 64pin (32 channels) Telco connector • Short haul loop 1.1km @3REN • EuroPOTS (ETSI EG201188) • Programmable AC impedance, feeding, ring and on-hook voltage • Caller-ID FSK and ITU V.23/Bell 202 generation

Voice Signaling
SIPv2 H.323v4 (simultaneously with B2BUA capability) • SIP call transfer, redirect • DTMF in-band & out-of-band • All tones programmable (dial, ringing, busy)

Call Switching and Services
Regular expression based call routing and number manipulation • Number blocking • Short-dialing • Digit collection, distribution and hunt groups • transparent line extension

Voice Processing
CODEC G.711 a-law/mu-law, G.723, G.729ab • G.726, G.727. T.38 fax relay • G.711 transparent fax and bypass

System
CPU Motorola MPC875 @ 133 MHz • Memory 32MB SDRAM/8MB Flash

Dimensions
19-in. rack-mount chassis
48.3W x 4.44H x 30.50D cm

Weight
4.1 kg

Power
100–240 VAC (50/60 Hz) • Power dissipation: > 22W (60W max, model SN4432/JS/RUI)

Temperature
32–104°F (0–40°C)

Humidity
5–80% (non condensing)

Compliance
EMC compliance: EN 55022 and EN 55024 • Safety compliance: EN 50950 • CE compliance • FCC Part 15 Class A • RoHS

* Specifications subject to change without notice.

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